

# SPARTAN FLOOD IR48



## LED Hazardous Area Floodlight Standard and Emergency Variants

The SPARTAN Floodlight range is designed specifically for hazardous environments which require high performance, high reliability, Infra-Red illumination. Housed in Marine Grade aluminium with a toughened glass window, and using Raytec's field-proven, long-life LED technology, SPARTAN Floodlights are ATEX and IEC Ex approved for all Zone 1 and Zone 2 applications, C1D2, UL, CSA, ABS and rated for T4, T5 and T6 environments/locations. Available in both standard and emergency versions.

SPARTAN Flood is available in a variety of different beam patterns, both circular and elliptical, to suit any application. The circular beam patterns maximise light output, while the elliptical beam patterns use Raytec's revolutionary VARIO holographic lens technology to shape the light providing greater illumination distances with significantly reduced energy wastage. The VARIO holographic beam patterns can easily be modified – offering ultimate flexibility to specifiers, distributors and end-users.

SPARTAN Flood has been designed from the ground up for easy installation, easy maintenance, easy inspection, and long life performance. SPARTAN uses **COOLEXTRUDE™** thermal management technology, ensuring a much cooler LED operating temperature allowing the product to operate for >10 years. A unique, maintenance-friendly design allows quick and easy servicing and inspection of all key components including LED and PSU modules if required.

## Features

- ATEX & IEC EX approved - Zone 1 & 2 and ABS
- Ultra long life LED
- Easy installation, maintenance and inspection
- Emergency variants
- Wide operating temperature range
- Integral photocell (optional)
- 5 year warranty
- VARIO lens technology – easy modification of beam patterns

## Why Raytec

- UK Designed & Manufactured
- Manufacturing precision engineered LED products
- Worldwide distributor support
- Lighting design and full technical support
- ISO9001 and ISO140001 accredited
- Award Winning Technology

## Key Features

### Ultra-Powerful

Latest high power LED technology

### Ultra-Flexible

Beam patterns from 10° to 120° both circular and elliptical.

Operating temperature range of -50°C to + 55°C with a T4/T5/T6 rating for even the most challenging conditions. (-20°C emergency variants)

Models incorporating VARIO Technology allow for easy modification of beam pattern.

### Ultra-Reliable

Industry leading 5 year warranty

Designed and manufactured in the UK to the highest standards including both ISO9001 & ISO14001.

Advanced electronics and LED's protected by vibration resistant and water proof potting compound

### Ultra-Modular

Both the LED and PSU modules are easily accessible for maintenance and inspection

Available as a standard or emergency fitting – upgradeable on site.

Removable PSU housings allows power supply to be fitted remotely

### Ultra-Efficient

**COOLEXTRUDE™** thermal management delivers class leading energy efficiency

Significant running and maintenance savings compared to traditional lighting technologies

SMART access wiring system for safe and efficient installation, set-up and ongoing inspection

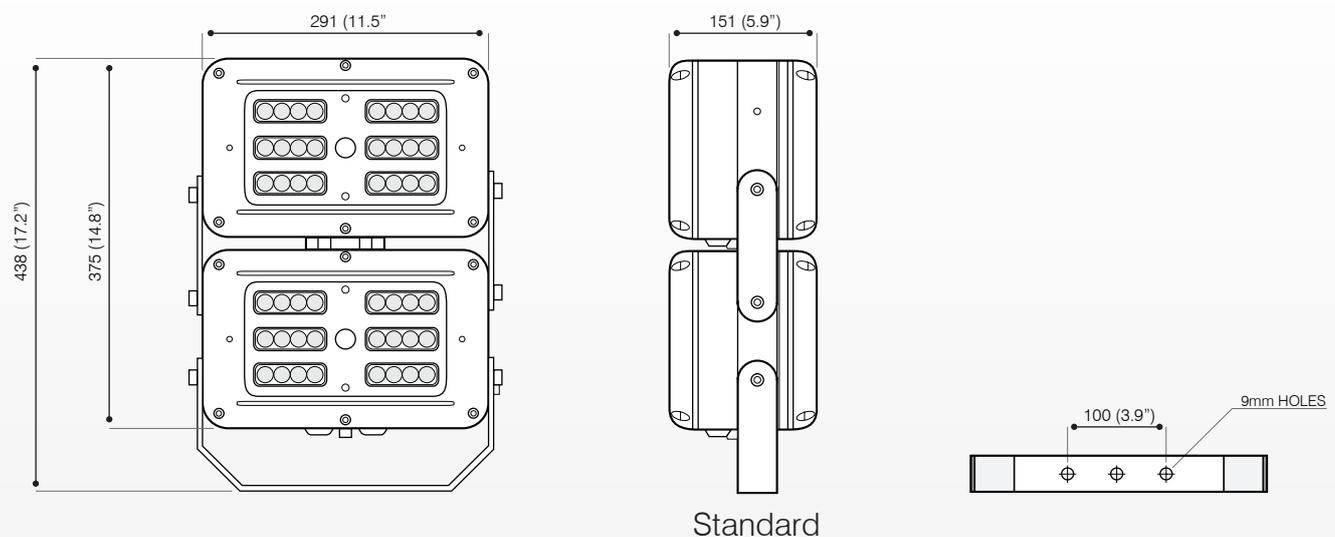
### Ultra-Support

Photometric files available (.ies & .ldt)

Full Lighting Design Service

Site specific Energy and Cost Saving Report available

## Product Dimensions



# Technical Specifications

## Certification

ATEX Rating: ATEX and IEC Ex rated for Gas and Dust  
 Hazardous Area rating: Zone 1 & 2 – Gas and Dust  
 Certificates: CML13ATEX3007 & IEC Ex CML 14.0001  
 Gas: II 2 GD Ex emb IIC T5 or T4 Gb  
 Ta -50°C to +55°C (-20°C emergency variants)  
 II 2 GD Ex emb IIC T6 Gb  
 Ta -50°C to +48°C (-20°C emergency variants)  
 Dust: Ex tb IIIC T82°C Db  
 IP66 & IP67 -  
 Ta -50°C to +55°C (-20°C emergency variants)  
 North America Rating: Class I, Division 2 Groups A, B, C, D, T5  
 Class II, Division 1 & 2 Groups E, F, G  
 Class III, Division 1 & 2  
 NEMA 4x, IP66/IP67  
 UL50E, UL8750, UL 1203  
 C22.2 No  
 Emergency Variants - Certification Pending  
 ABS Certificate # 15-LD1364539-1-PD

## Electrical

Input: 110-254V 50/60Hz AC only  
 Power: Standard - 136W  
 Emergency - 130W  
 Termination: Incoming terminal block suitable for looping 4 core 4mm<sup>2</sup> cable  
 Power Factor >0.95  
 Cable entries 2xM20 as standard (other entries available upon request), dispatched complete with one ATEX/ IEC Ex approved blanking plug 3/4" NPT as standard on C1D2

## Optical

Beam Patterns-circular: 10°x 10° or 30°x 30° or 50°x 50° or 120°x 120°  
 (10 x 10 option can be upgraded to VARIO Technology)  
 Beam Patterns-elliptical: 35°x 10° or 60°x 25° or 80°x 30° or 120°x 50°  
 (VARIO)  
 LED type: Platinum SMT LEDs  
 Number of LEDs: 48

## Circular beam pattern

Part Codes	Description (T4 variants as standard)	Distances
SPX-FL48-I-1010	SPARTAN Flood, 48 LED, Infra-Red, 10°x 10° beam	350m (1,148ft)
SPX-FL48-I-3030	SPARTAN Flood, 48 LED, Infra-Red, 30°x 30° beam	150m (492ft)
SPX-FL48-I-5050	SPARTAN Flood, 48 LED, Infra-Red, 50°x 50° beam	108m (354ft)
SPX-FL48-I-120120	SPARTAN Flood, 48 LED, Infra-Red, 120°x 120° beam	50m (164ft)

Add -C1D2 to part code for North American standards

For emergency versions – add '-EM' to the above codes  
 For options fitted with photocell add '-PC' to the above codes  
 Contact Raytec for T5 and T6 variants

## Elliptical beam pattern

Part Codes	Description (T4 variants as standard)	Distances
SPX-FL48-I-3510	SPARTAN Flood, 48 LED, Infra-Red, 35°x 10° beam	224m (735ft)
SPX-FL48-I-6025	SPARTAN Flood, 48 LED, Infra-Red, 60°x 25° beam	130m (426ft)
SPX-FL48-I-8030	SPARTAN Flood, 48 LED, Infra-Red, 80°x 30° beam	100m (328ft)
SPX-FL48-I-12050	SPARTAN Flood, 48 LED, Infra-Red 120°x 50° beam	70m (230ft)

Add -C1D2 to part code for North American standards

For emergency versions – add '-EM' to the above codes  
 For options fitted with photocell add '-PC' to the above codes  
 Contact Raytec for T5 and T6 variants

## Mechanical/Environmental

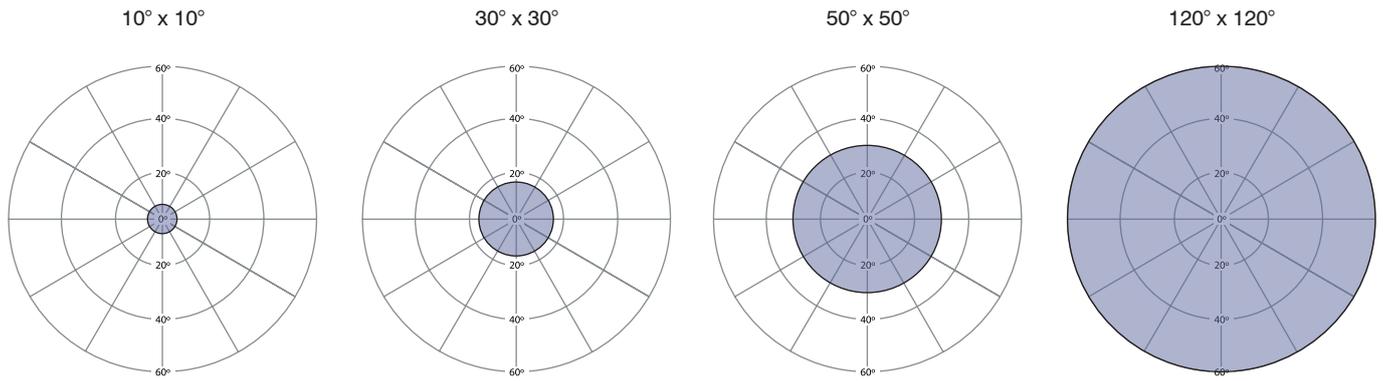
Burning position: Universal  
 IP rating: IP66 & IP67  
 Temperature range: -50°C to +55°C (-20°C emergency variants)  
 Weight: 19kg (41.9lbs) standard  
 21kg (46.3lbs) emergency  
 Enclosure: Marine grade aluminium epoxy powder coated, toughened glass, all external fasteners and brackets are marine grade stainless steel  
 Unit Colour: Silver (RAL 9006), emergency battery box red (RAL3024)  
 Installation instructions: Raytec ref 910-M-0094 – please contact Raytec for copy  
 Dimensions: 291 x 438 x 151std / 215mm emergency  
 (11.4 x 17.2 x 5.9 std / 8.5" emergency)  
 Mounting: U bracket (see dimension drawings on Page 2) – complete with locking screw

## Emergency

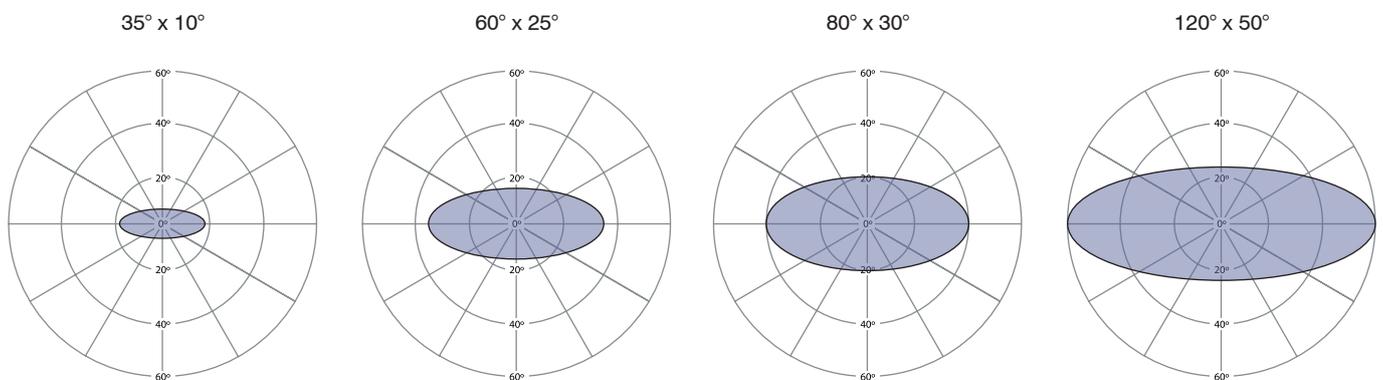
Duration: Up to 2hrs at 25% power (1 x battery unit)  
 Battery: Ni/Cd 12V 4.5Ah  
 Charge time: 20 hours



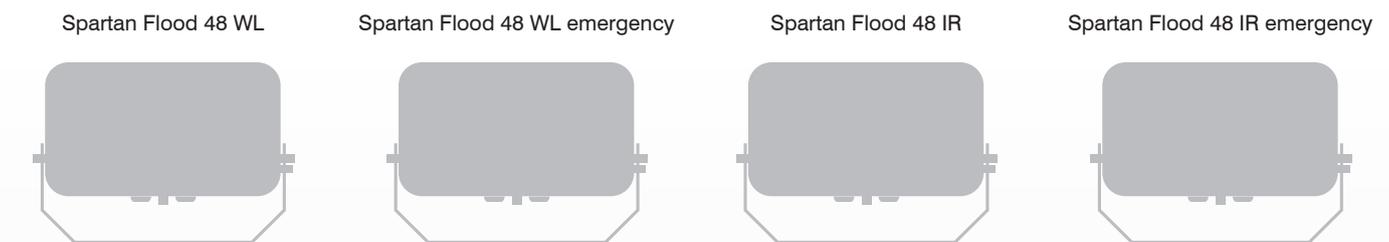
## Beam patterns - Circular



## Beam patterns – Elliptical (VARIO)



## Products in the SPARTAN Flood 48 range



## Other Products in the SPARTAN Hazardous Area Family

